REMARKS

Claims 1-3, 8, and 9 remain pending. Claim 4 was previously canceled. Claims 5-7 were previously withdrawn from consideration.

Claims 1-3, 8, and 9 stand rejected under 35 USC 103(a) as unpatentable over Knaup, U.S. Patent No. 7,082,808, in view of Yasushi, Japanese Laid-open Patent Application Publication No. 2002-316226.

The Examiner asserts that Knaup discloses all of the elements of claim 1, except that Knaup fails to disclose the percentage of the compressed border portion and "Knaup does not set forth the use of his process to mirrors" (see Office Action, page 3). According to the Examiner, optimizing "a certain percentage" range in Knaup would have been obvious to one of ordinary skill in the art at the time the invention was made. To complete the rejection, the Examiner recognized that he must also show that one of ordinary skill in the art would have applied Knaup's method "by the teaching of Yasushi to form a pressed optical element/converging mirror in order to utilize a pressed plate for universal usage" (see Office Action, page 4). The rejection is respectfully traversed.

Claim 1 recites: "the border portion being compressed to have a thickness which is at least 70% of a thickness of the metal plate before drawing."

Thus, claim 1 positively recites two things, the first being a thickness that is at least 70% of the metal plate before drawing the die. Furthermore, the claim positively recites a border thickness that is compressed. Reciting a compressed border portion is a positive recitation of the claim. In other words, one of the requirements of the broadest claim is that the die assembly be structurally configured to supply some measurable compression. Therefore, claim 1 does not read on either Knaup or Yasushi, alone or in combination. Although Knaup and Yasushi disclose having no compression, the absence of compression is outside the scope of claim 1 because claim 1 recites a border "compressed to have a thickness." In order to be "compressed to have a thickness" and, therefore, to be within the scope of the claimed invention, it is logical that there must be at least some compression.

Zero border compression is the same as not being compressed at all. Moreover, the claimed invention concerns a recited range for the border portion to be (at least) 70% to 90% prior to drawing of the metal plate thickness. This manner of claiming the invention explicitly carves out zero compression for its undesirability. "The mirror of which border portion was not compressed at all (see Fig. 7) showed uneven light convergence" (see specification, paragraph [0030]).

Neither Knaup nor Yasushi discloses varying the thickness in the manner claimed. Both fail to disclose the border portion thickness recited prior to drawing of the plate thickness. The references also disclose nothing regarding the desirability of the 70% figure as claimed. Claim 1, in contrast, does set forth that the border portion must be at least 70% prior to drawing of the metal plate thickness. As applicants explain, "The mirror of which border portion 13 was compressed to have a 70% thickness (see Fig. 4) made the most desirable light converging performance in the main scanning direction and the sub scanning direction. The mirrors of which border portions were compressed to have a 80% thickness and to have a 90% thickness respectively (see Figs. 5 and 6) made good light converging performances in the sub scanning direction." (See specification, paragraph [0030]).

Applicants demonstrated by experimentation that choosing this thickness has an effect that is desirable (see Fig. 4). Fig. 4 indicates a beam converging performance of a mirror. The mirror's border portion was compressed to have a thickness that is 70% of the thickness of the metal plate before drawing. Accordingly, applicants displayed the result-effective variable in the figures and recited the range in claim 1 when read in light of the meaning of the specification. Compression at 70% of the thickness shows the desired results (see Fig. 4). To a lesser extent, 80% and 90% are shown to have satisfactory performance. Where there is no border compression at all, the result is not effective (see Fig. 7). That result is also not within the scope of broad claim 1, as stated above.

The parameter for the compression rate that was optimized is thus a result-effective variable. It would not have been obvious for one of ordinary skill in the art to vary every parameter of a system in order to optimize the effectiveness of the system since there is no

evidence that prior art recognized that particular parameter affected the result. See *In re Antonie*, 559 F.2d 618 (CCPA 1977) (stating that it is not obvious to optimize a parameter unless it would have been effective to do). The Examiner's assertion that varying the thickness was obvious to try is grounded in impermissible hindsight. Therefore, *prima facie* obviousness is not established, and claim 1 is allowable.

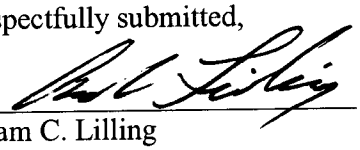
Claims 2, 3, and 8 depend from claim 1 and are allowable at least for the same reasons.

In view of the above, each of the claims in this application is in condition for allowance. Accordingly, applicants solicit early action in the form of a Notice of Allowance.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. **325772033800**.

Dated: August 30, 2007

Respectfully submitted,

By 

Adam C. Lilling
Registration No. 60,272

Morrison & Foerster LLP
1650 Tysons Blvd, Suite 400
McLean, Virginia 22102
Telephone: (703) 760-7743
Facsimile: (703) 760-7777